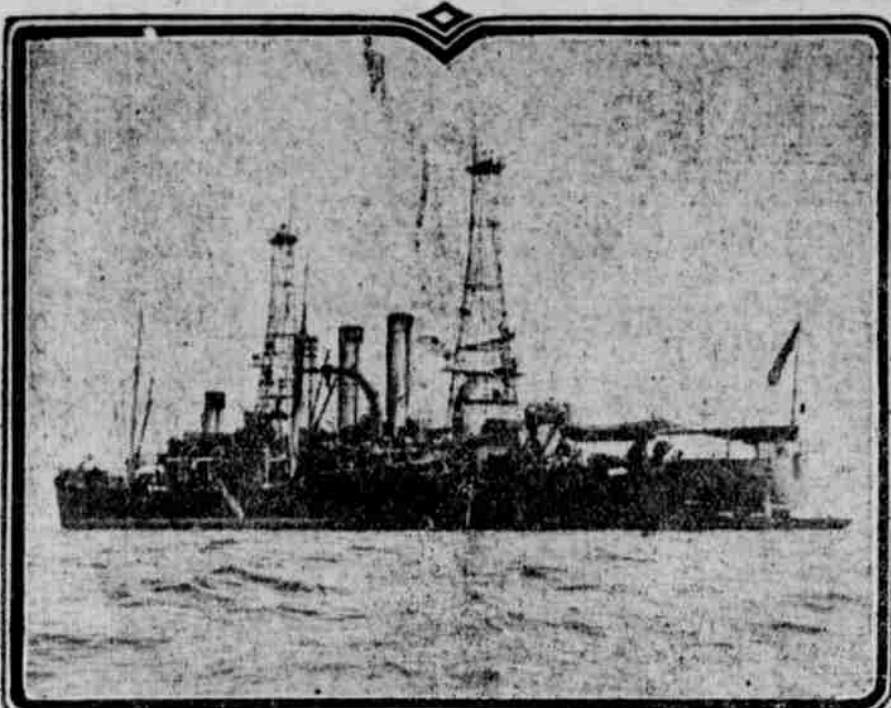
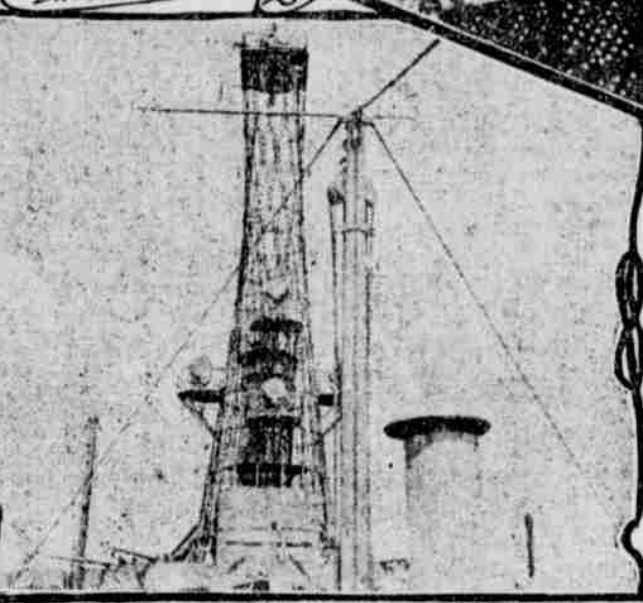
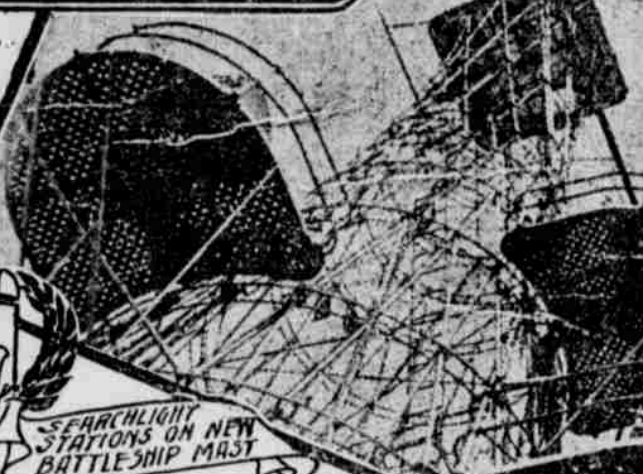


The New Battleship Masts



U.S. BATTLESHIP COALING FROM A COLLIER, SHOWING NEW STYLE MASTS



SHOWING NEW STYLE MASTS COMPLETE

THE officials who have the say of things at the U. S. navy department have evidently become thorough converts to the advantages of the new style masts, or "fire control towers," as they are technically termed, which have been installed on most of the United States battleships and are now being placed on the others. The government has been experimenting with these new "peach basket" masts for several years now, but it is only lately that there has come evidence that the new wrinkle has been finally and definitely adopted as an adjunct of Uncle Sam's approved type of warships.

The new masts are so unique and so radically new that it is small wonder that the other powers have been prone to go slow in introducing such an innovation. No other nation in the world has anything of this sort on its fighting craft and so naturally Uncle Sam could not profit by the experience of anybody else. Then, too, it costs thousands and thousands of dollars to build and install one of these great skeleton steel structures and naturally the navy department wants to be right ere it goes ahead in the matter. This stage has now been reached.

First of all an experimental mast was rigged up on the monitor Florida, and in order to try out the new invention under actual war conditions the monitor was anchored in Hampton Roads and shells were hurled at the mast by the huge guns on a warship stationed some distance away. The new kind of tower withstood the gunfire well enough to justify many of the claims which had been made for the invention theoretically. Thereupon Uncle Sam went ahead and ordered such masts installed on a number of the old battleships of our navy and on those then building. A total of 22 masts were thus put in service and then a halt was called in order to make thorough exhaustive tests of the new masts under every imaginable condition of sea service. It is this period of probation which has but just now come to an end. There were rumors at one time that the new style mast had been pronounced a failure and would be discontinued, but this proved unfounded. The new invention has been officially endorsed and now the work will

proceed of not only providing such masts on all our battleships but also on the armored cruisers. The new "woven wire" or "peach basket" mast, as they are familiarly called, are primarily observation towers and their function is an integral part of the modern "fire control" system of our battleships—the system for directing and governing the gunnery fire in time of battle. The peculiar construction of the new structures is to be attributed to a desire to safeguard the electrical and other communicative lines upon which the greatest dependency is placed in time of battle—the nerves of the battleship, as it were. For years there was a constantly increasing storm of criticism against the tapering steel tubes known as military masts, with which the battleships were formerly fitted. It was claimed that a single well-placed shot from an enemy's 12-inch gun would sever that style mast and in addition to heavy loss of life would rob the ship of its observatory and searchlight station. On the other hand it is claimed that an enemy

might shoot away fully 75 per cent. of the steel latticework comprising one of the new cylindrical towers without putting it out of commission. Indeed, tests have proven that an enemy would have to sever at least 46 of the steel tubes comprising one of these new style masts ere it would topple over. The average mast or tower as installed on one of our battleships is 99 feet in height and stands 120 feet above the water line. The base of the mast is circular, ranging in diameter from 20 to 26 feet, but all masts have a uniform diameter of 9 feet 6 inches at the top. Each mast is crowned with a platform 10 feet square, the 100 square feet of space thus provided being ample for the observers and the electrical and mechanical signaling devices which enable these lookouts to communicate with the officers on the ship below.

The tower is circular in form—or, to be exact, the shape of the tower might be designated as that of a truncated cone the exterior surfaces, being slightly concave near the top. This outline not only helps the tower to withstand wind strains but makes it possible to employ what is known as the double spiral construction, which makes for stability in the highest degree. By this scheme the steel tubes are arranged in such manner that half of them slant from right to left, while the remainder incline in the opposite direction. Each individual tube terminates at the top platform on exactly the opposite side of the tower from that at which it started at the base. Further stability is contributed by steel rings—double rows of them encircle the framework at intervals from the base to the top. These rings act as braces for the double spiral network of tubing and to insure a uniform distribution of all strains the tubing is fastened to each row of rings.

TRAGEDY OF OLD OCEAN

Disappearance of Captain and Crew Never Was Satisfactorily Explained

THE mystery of what became of the master and crew of the British bark Invernesshire, which sailed from Hamburg for Santa Rosa, Cal., and was found at anchor and abandoned off the Falkland Islands, recalls vividly to the nautical minds the fate of the brig Mary Celeste of New York, for nearly forty years the prize riddle of the sea, the Bangor (Me.) correspondent of the New York Times writes. The Mary Celeste sailed from New York for Genoa with a cargo of petroleum and alcohol. She was commanded by Capt. Benjamin S. Briggs of Marion, Mass., with Albert G. Richardson of Stockton, Me., as first mate; Andrew Grilling of New York as second mate and Edward William Head of New York, Volkert Lorenzer, Arlen Harbous, B. Lorenzer and Gottlieb Goodshood, all of Germany, as the crew. The captain's wife and small child were also on board. The brig was in first-class condition, well manned and well equipped in every way, and when she sailed from New York on November 17, 1872, the whole ship's company was happy and contented. Yet none of them was ever again seen, dead or alive. The brig was found on December 4 off the Azores, drifting aimlessly about in light winds, with her head sails set and all her other canvas down. There was nothing to show why she had been abandoned or what had become of her people. She was thus found by the brig Dei Gratia, from New York for the Mediterranean, and after a careful examination Captain Moorehouse of the Dei Gratia put a prize crew on board and sent her into Gibraltar, where she arrived on December 13, 1872, and was turned over to the admiralty court. Her owners refused to pay the heavy salvage demanded and let the salvors take her.

"Fanny, my dear wife" Whether these words were written by the mate merely as an expression of affection while thinking of home, or in a moment of panic and despair when about to abandon the vessel, can only be conjectured. There was nothing else about the vessel to indicate the state of mind prevailing on board when she was abandoned. The date of this last entry in the mate's log was November 24. When ten days later she was boarded by men from the Dei Gratia her stern boat was gone and it appeared that some food, probably canned goods, had been taken from a locker. Otherwise everything was in such ship-shape that, but for the date of the last entry in the log, the Dei Gratia's men could have sworn that the vessel had been abandoned within an hour. Her running rigging was all properly made fast and the slack coiled neatly on deck or over the pins. The companionways were open, half-turned music lay upon the rack of the little cabinet organ in the cabin and children's toys were scattered upon the floor. In the captain's stateroom his gold watch hung at the head of his berth and in his wife's room the impress of a child's head was distinct upon the pillow. In the cook's galley the coppers were on the stove, and meat in process of preparation was on the table. In the fore-cabin the men had not disturbed their chests, no clothing was missing, and even money had been left behind. It was plain that the crew had left her very suddenly. That the boat was lowered away in a hurry and with some confusion was indicated by a broken davit. In the 33 years that have elapsed since the Mary Celeste was abandoned countless stories, all more or less fanciful, have been written about her, and numerous theories have been advanced in explanation of this greatest of sea riddles. Mutiny, disease and piracy have been suggested. In 1877 a story was circulated to the effect that Mate Richardson had been seen hiding in the West Indies, and that he and members of the crew had murdered the captain and stolen many thousands of dollars that the vessel was carrying.

As a matter of fact, the Mary Celeste carried no money of any amount. As late as 1897 another yarn was published to the effect that a sailor, who claimed to have been the mate of the Dei Gratia, had made a death-bed confession in Iquique, saying that when he boarded the Mary Celeste he found that all hands, except Captain Briggs, his wife and the cook, had died of smallpox, and that he, Jacob Howell, the confessor, had thrown all three of the survivors overboard, taken \$8,000 in gold that Mate Richardson had been carrying for the purpose of "going into business in Africa," and then had returned to the Dei Gratia with the report that the Mary Celeste had been found completely abandoned. This absurd story was first published in San Francisco and later found its way to Maine. It was, on the face of it, a pure invention, like the story of the murder of the captain. The only reasonable explanation is that her master and crew became alarmed by the rumbling of the cargo and, fearing that her decks would be blown off by the accumulation of confused gas from the petroleum and alcohol, got out of her in a hurry. It is well known that oil cargoes confined under tightly battened hatches will generate gases, especially when the vessel is pitching and rolling in heavy weather, and that these gases, thus confined, will cause a loud rumbling noise like distant thunder. The log of the Mary Celeste contains numerous allusions to rumblings below decks, and indicates a fear among her officers and crew that an explosion would take place. Evidently, if this theory holds, Captain Briggs did not know that the danger might have been averted by removing the hatches and allowing the gases to escape, as is often done. Assuming that the Mary Celeste's people left her in a great hurry, alarmed at the danger of an explosion, the question arises, "What became of them?" The theory generally accepted by seafaring men is that they tried to make a landing on the Azores, and that the boat was capsized in the heavy surf, although there is no record of either the boat or any of the bodies ever having been found.

LOOK TO YOUR KIDNEYS.

When Suffering From Backache, Headaches and Urinary Troubles.

They are probably the true source of your misery. To keep well, you must keep your kidneys well. There is no better kidney remedy than Doan's Kidney Pills. They cure sick kidneys and cure them permanently.

Edward Porsche, 1833 Cleveland Ave., Chicago, Ill., says: "My eyes were puffed from dropsy and my face and feet terribly swollen. I was laid up for three months and although I doctored, I received little benefit. Doan's Kidney Pills relieved the awful back pains, stopped the swelling and made me feel 100 per cent. better."

Remember the name—Doan's.

For sale by all dealers. 50 cents a box. Foster-Milburn Co., Buffalo, N. Y.

Father of the Man. Miss Amelia Austin listened with breathless attention to Mrs. Amasa Hunting's radiant account of the doings of James Hunting, her husband's younger brother, who had left Wo-brook-in-the-Hills in his youth and had become a millionaire. "Where is Jim this summer?" Miss Amelia inquired, at the end of the recital. "He has gone abroad for baths," replied Mrs. Hunting. "I ain't one mite surprised to hear that," Miss Amelia said. "His mother never could make him wash his neck."—Youth's Companion.

STUBBORN ECZEMA ON HANDS

"Some nine years ago I noticed small pimples breaking out on the back of my hands. They became very irritating, and gradually became worse, so that I could not sleep at night. I consulted a physician who treated me a long time, but it got worse, and I could not put my hands in water. I was treated at the hospital, and it was just the same. I was told that it was a very bad case of eczema. Well, I just kept on using everything that I could for nearly eight years until I was advised to try Cuticura Ointment. I did so, and I found after a few applications and by bandaging my hands well up that the burning sensations were disappearing. I could sleep well, and did not have any itching during the night. I began after a while to use Cuticura Soap for a wash for them, and I think by using the Soap and Ointment I was much benefited. I stuck to the Cuticura treatment, and thought if I could use other remedies for over seven years with no result, and after only having a few applications and finding ease from Cuticura Ointment, I thought it deserved a fair trial with a severe and stubborn case. I used the Ointment and Soap for nearly six months, and I am glad to say that I have hands as clear as anyone."

"It is my wish that you publish this letter to all the world, and if anyone doubts it, let them write me and I will give them the name of my physician, also the hospital I was treated at." (Signed) Miss Mary A. Bentley, 93 University St., Montreal, Que., Sept. 14, 1910.

The Pronouns. "We must economize," said the man of high financial authority. "Your grammar is at fault," replied the ordinary citizen. "Why do you insist on using the first instead of the second person plural?"

A Card. We, the undersigned, do hereby agree to refund the money on a 50-cent bottle of Greene's Warranted Syrup of Tar if it fails to cure your cough or cold. We also guarantee a 25-cent bottle to prove satisfactory or money refunded. Your Druggist, My Druggist, Any Druggist in Michigan.

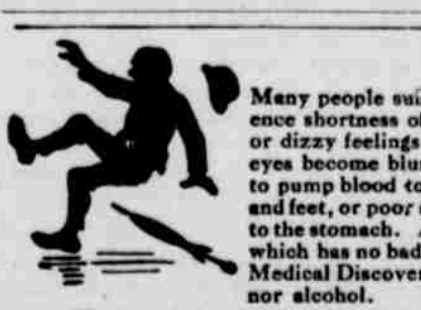
And it sometimes happens that a man likes to have his wife get so mad she won't speak to him—then she will not ask him for money.

FILES CURED IN 6 TO 14 DAYS. Your Druggist will refund money if PAIN OINTMENT fails to cure any case of itching, blind, bleeding or protruding piles in 6 to 14 days. 50c.

The reason the biggest advertisers his one idea so vigorously is that it is his whole stock in intellectual trade.

Mrs. Winslow's Soothing Syrup. For children teething, softens the gums, reduces inflammation, allays pain, cures wind colic. See a bottle.

Life is full of ups and downs—but unfortunately most of us are down more of the time than up.



The ingredients, as attested under oath, are Stone root (Caulis Radix Canadensis), Bloodroot (Sanguinaria Canadensis), Golden Seal root (Hydrastis Canadensis), Queen's root (Stiffingia Syriaca), Black Cherry bark (Prunus Virginiana), Mandrake root (Podophyllum Peitotum), with triple refined glycerine, prepared in a scientific laboratory in a way that no druggist could imitate. This tonic contains no alcohol to shrink up the red blood corpuscles; but, on the other hand, it increases their number and they become round and healthy. It helps the human system in the constant manufacture of rich, red blood. It helps the stomach to assimilate or take up the proper elements from the food, thereby helping digestion and curing dyspepsia, heart-burn and many uncomfortable symptoms, stops excessive tissue waste in convalescence from fevers; for the run-down, anemic, thin-blooded people, the "Discovery" is refreshing and vitalizing. Stick to this safe and sane remedy, and refuse all "just as good" medicines offered by the druggist who is looking for a larger profit. Nothing but Dr. Pierce's Golden Medical Discovery will do you half as much good.

Household Economy

How to Have the Best Cough Syrup and Save \$2, by Making it at Home.

Cough medicines, as a rule, contain a large quantity of plain syrup. If you take one pint of granulated sugar, add a pint of warm water and stir about 5 minutes, you have as good syrup as money could buy.

If you will then put 24 ounces of Pinex (50 cents worth) in a pint bottle, and fill it up with the Sugar Syrup, you will have as much cough syrup as you could buy ready made for \$2.50. It keeps perfectly.

And you will find it the best cough syrup you ever used—even in whooping cough. You can feel it take hold—usually stops the most severe cough in 24 hours. It is just laxative enough, has a good tonic effect and taste is pleasant. Take a teaspoonful every one, two or three hours.

It is a splendid remedy, too, for hoarseness, asthma, chest pains, etc.

Pinex is the most valuable concentrated compound of Norway white pine extract, rich in gualcol and all the healing pine elements. No other preparation will work in this formula.

This recipe for making cough remedy with Pinex and Sugar Syrup is now used and prized in thousands of homes in the United States and Canada. The plan has often been imitated but never successfully.

A guarantee of absolute satisfaction, or money promptly refunded, goes with this recipe. Your druggist has Pinex or will get it for you. If not, send to The Pinex Co., 254 Main St., Ft. Wayne, Ind.

In Different Parts of the House. Caller (to little daughter of the house)—Hullo, dear? Where are you off to?

Daughter of the House—I'm just going up to watch Marie do mother's hair.

Caller—Oh, dear! Then I'm afraid we shan't be able to see your mother.

Daughter of the House—Oh, yes; you'll find her down there in the drawing room.

Nothing amuses the average man more than to have some woman believe she is bossing him.

FREE ADVICE TO WOMEN

Women suffering from any form of illness are invited to promptly communicate with Mrs. Pinkham at Lynn, Mass. All letters are received, opened, read and answered by women. A woman can freely talk of her private illness to a woman; thus has been established this confidence between Mrs. Pinkham and the women of America which has never been broken. Never has she published a testimonial or used a letter without the written consent of the writer, and never has the Company allowed these confidential letters to get out of their possession, as the hundreds of thousands of them in their files will attest.

Out of the vast volume of experience which Mrs. Pinkham has to draw from, it is more than possible that she has gained the very knowledge needed in your case. She asks nothing in return except your good will, and her advice has helped thousands. Surely any woman, rich or poor, should be glad to take advantage of this generous offer of assistance. Address Mrs. Pinkham, care of Lydia E. Pinkham Medicine Co., Lynn, Mass.

Every woman ought to have Lydia E. Pinkham's 80-page Text Book. It is not a book for general distribution, as it is too expensive. It is free and only obtainable by mail. Write for it today.

The Army of Constipation

Is Growing Smaller Every Day.

CARTER'S LITTLE LIVER PILLS are responsible—they not only give relief, they permanently cure Constipation. Millions use them for Biliousness, Indigestion, Sick Headache, Sallow Skin.

SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature.

Patent Your Idea. They may bring you wealth. 50-page Book Free. See Vitaguard & Co., Pat. Attys., Box K, Washington, D.C.

Weak Heart

Many people suffer from weak hearts. They may experience shortness of breath on exertion, pain over the heart, or dizzy feelings, oppressed breathing after meals or their eyes become blurred, their heart is not sufficiently strong to pump blood to the extremities, and they have cold hands and feet, or poor appetite because of weakened blood supply to the stomach. A heart tonic and alterative should be taken which has no bad after-effect. Such is Dr. Pierce's Golden Medical Discovery, which contains no dangerous narcotics nor alcohol.